

ing." It would be of great interest to examine the response of these patients' cells to colchicine.

In a larger biologic sense, the REB⁻ fibroblasts may represent an experiment of nature in which the absence of a particular response, i.e., the absence of collagenase stimulation, provides additional insight into normal regulatory mechanisms. In this case, the REB⁻ cells behaved as though a portion of the microtubular system involved in normal collagenase synthesis were already functionally disrupted. Such an observation, although indirect, serves to reaffirm the belief that this system may be important in the normal regulation of collagenase synthesis, i.e., intact microtubules are required for an orderly, well-controlled rate of collagenase synthesis. It must be emphasized, however, that these studies do not absolutely prove that colchicine acted on microtubules and, thus, we cannot as yet assign a specific cellular mechanism for the drug.

The second possibility raised by these studies is that the REB⁻ cells have an as yet uncharacterized basic mutation which had led to the failure to respond to colchicine. Indeed, various colchicine-resistant mutant cell strains have been described and include both permeability mutants [26] and tubulin mutants [26-28]. In addition, it is possible that certain "kinetic" mutants may ultimately be seen in which a subtle change in the rate of depolymerization or repolymerization of microtubules is the primary manifestation [29]. Alternatively, since certain proteins have been shown to interact with the colchicine binding site of tubulin [30], it is possible that the primary aberration in the REB⁻ cells will be at this level.

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Erratum

In the article by J. K. Wilkin, "A Quantitative, Non-Invasive Method for the Characterization of Flushing Reactions" (78:276-279, 1982), the first formula on page 276 should read:

$$H = \frac{\lambda a (t_1 - t_2)}{L}$$